

In the claims:

1. A system for using Dynamic Host Configuration Protocol (DHCP) address assignments to determine a local destination address of a received packet in a Network Address Translation (NAT) environment, the system comprising:
 - 5 a DHCP server to assign local Internet Protocol (IP) addresses to devices on a network;
 - a NAT device to execute network address translation;
 - a packet device to receive packets; and
 - an addressing device to determine the local destination address of the packets received by the packet device, wherein the addressing device uses an association table created from symbolic names of the devices on the network and the local IP addresses associated with the devices.
2. The system of claim 1, wherein the packet device is a router.
3. The system of claim 2, wherein the DHCP server is located at the router.
4. The system of claim 2, wherein the NAT device is located at the router.
5. The system of claim 1, wherein the addressing device determines a symbolic name of a destination address of a device from the packet, utilizes the association table to determine the destination address of the packet, and causes the packet to be sent to the destination address.
6. A method of using Dynamic Host Configuration Protocol (DHCP) address assignments to determine a local destination address of a received packet in a Network Address Translation (NAT) environment, the method comprising:
 - 20 assigning local Internet Protocol (IP) addresses to devices on a network;
 - executing network address translation;
 - receiving packets from a remote network;

using an association table created from symbolic names of the devices on the network and the local IP addresses associated with the devices; and

determining the local destination address of the packets received by the packet device.

7. The method of claim 6, wherein a router receives the packets.

5 8. The method of claim 7, wherein the router includes a DHCP server.

9. The method of claim 7, wherein the router includes a NAT device.

10. The method of claim 6, further including determining a symbolic name of a destination address of a device from the packet, utilizing the association table to determine the destination address of the packet, and causing the packet to be sent to the destination address.

11. The method of claim 6, wherein the remote network is an Internet.

12. An apparatus for using Dynamic Host Configuration Protocol (DHCP) address assignments to determine a local destination address of a received packet in a Network Address Translation (NAT) environment, the apparatus comprising:

a name acquisition device to determine symbolic names of devices on a network;

an address acquisition device to determine local Internet Protocol (IP) addresses of the devices on the network; and

a data transfer device to transfer data with a packet receiving device; and

an addressing device to determine the local destination address of the packet received by the packet device, wherein the addressing device uses an association table created from the symbolic names of the devices on the network and the local IP addresses associated with the devices.

13. The apparatus of claim 12, wherein the packet receiving device is a router.

14. The apparatus of claim 13, wherein a DHCP server is located at the router.

15. The apparatus of claim 13, wherein a NAT device is located at the router.
16. The apparatus of claim 12, wherein the addressing device determines a symbolic name of a destination address of a device from the packet, utilizes the association table to determine the destination address of the packet, and causes the packet to be sent to the destination address.

- 5 17. A system for initiating an Internet Protocol (IP) telephony session over a network, comprising:
- an IP telephony device;
 - a packet device to receive packets;
 - a DHCP server to assign local IP addresses to devices on the network;
 - a NAT device to execute network address translation;
 - an association device to create an association table from symbolic names of the devices on the network and the local IP addresses associated with the devices; and
 - an addressing device to determine, based upon the association table, a local destination address of each of the packets received by the packet device.

18. The system of claim 17, wherein the packet device is a router.
19. The system of claim 18, wherein the DHCP server is located at the router.
20. The system of claim 18, wherein the NAT device is located at the router.

21. An addressing device to use Dynamic Host Configuration Protocol (DHCP) address assignments to determine a local destination address of a received packet in a Network

- 20 Address Translation Environment, comprising:

- a computer-readable medium; and
- a computer-readable program code, stored on the computer-readable medium, having instructions to

assign local Internet Protocol (IP) addresses to devices on a network,
execute network address translation,
receive remote packets from a remote network,
utilize an association table created from symbolic names of the devices on the
5 network and the local IP addresses associated with the devices, and
determine the local destination address of the packets received by the packet
device.

22. The addressing device of claim 21, wherein a router receives the packets.

23. The addressing device of claim 22, wherein the router includes a DHCP server.

24. The addressing device of claim 22, wherein the router includes a NAT device.

25. The addressing device of claim 21, wherein the computer-readable program code further
includes instructions to determine a symbolic name of a destination address of a device from
the packet, utilizing the association table to determine the destination address of the packet,
and causing the packet to be sent to the destination address.

26. The addressing device of claim 21, wherein the remote network is an Internet.